

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method, comprising:
applying a thermoplastic bonder to the perimeter perimeters of a ball grid array (BGA) package, wherein the thermoplastic bonder is applied to the BGA package directly between a first surface and a second surface of the BGA package such that the thermoplastic bonder remains at the perimeters of the BGA package between the first surface and the second surface;
applying the thermoplastic bonder to an array of solder balls of the BGA package, included in the BGA package wherein the thermoplastic bonder is applied to the solder balls between the first surface of the BGA package and the solder balls, and between the second surface of the BGA package and the solder balls, independent of the applying of the thermoplastic bonder to the perimeter of the BGA package; and
attaching a printable circuit board (PCB) to the BGA package via the thermoplastic bonder on the perimeter of the BGA package and the array of solder balls with the thermoplastic bonder.
2. (Currently Amended) The method of claim 1, wherein the BGA package comprises: an integrated circuit (IC) device;
~~a first surface coupled with the IC device; and~~
~~solder joints to attach the array of solder balls with the first surface and a second surface.~~
3. (Currently Amended) The method of claim 1, wherein the ~~applying of the thermoplastic bonder comprises applying the bonder between the first surface~~

comprise a top surface, and the second surface comprises a bottom surface to provide resistance to the BGA package against warpage.

4. (Currently Amended) The method of claim ~~3~~ 1, ~~wherein the~~ further comprising preventing warpage of the BGA package by applying the thermoplastic bonder in a weakest area of the BGA package, the weakest area including the perimeters of the BGA package comprises at least one; wherein the BGA package includes one or more of an opening of the BGA package, a cracking of the BGA package, a curving of the BGA package, bending, and a breaking of the second surface BGA package.
5. (Currently Amended) The method of claim 1, wherein the applying of the thermoplastic bonder to the perimeters of the BGA package further comprises applying the thermoplastic bonder between the first surface and the second surface of the BGA package such that the thermoplastic bonder is applied exclusively to the perimeters of the BGA package, wherein the perimeters include ~~is further applied to one or more of edges and corners of the BGA package.~~
6. (Currently Amended) The method of claim ~~1~~ 4, further comprising determining the weakest area of the BGA package to prevent the warpage ~~wherein the applying of the thermoplastic bonder comprises applying the thermoplastic bonder using a bonder dispenser.~~
7. (Cancelled)
8. (Currently Amended) The method of claim 1, wherein the ~~applying of the thermoplastic bonder comprises using~~ is applied via one or more of a hot melting jig or and a dispenser; the hot melting jig and the dispenser comprise at least one of a hot melt hand applicator and an adhesive unit.

9. (Cancelled)

10. (Currently Amended) The method of claim ~~18~~, wherein the ~~independent~~
~~application of the thermoplastic bonder is~~ further applied via ~~performed using~~
software to control placement distance of the thermoplastic bonder ~~with respect to~~
the ~~array of perimeters of the BGA package with respect to the~~ solder balls of the
BGA package.

11-31 (Cancelled)